

### ABSTRACT OF THE DISCLOSURE

A method for safe programming of an electrically erasable and programmable memory (e.g., a flash EEPROM) in a control unit (e.g., a vehicle ECU) utilizing a programming data set that is read into the control unit and evaluated thereby. The programming data set contains, besides the memory-map to be programmed, an equipment description of the control units authorized for programming so that the control unit can perform an identity check to determine whether it itself belongs to the range of authorized control units. If the identity check indicates that it is authorized for programming, reprogramming is performed using a programming device provided in the control unit itself.